1) . What is the difference between enclosing a list comprehension in square brackets and parentheses?

Enclosing the square parentheses will create a list from the result of the operation whereas in case of parentheses it will create a tuple as a result.

2) What is the relationship between generators and iterators?

Generators are the one which will generates a new elements with a given pattern.

Whereas iterators are the one which can extract the data from the iterables from the looping or with the next function.

3) What are the signs that a function is a generator function?

Once you print the function you will get an generator object.

Also with the help of the next() function we can get the next values in the series.

4) What is the purpose of a yield statement?

Yield statement is used to hold the results and then in the next execution it will add up into the previous values as per the defined condition and give the results based on the previous result.

5) What is the relationship between map calls and list comprehensions? Make a comparison and contrast between the two.

Map function is mainly used for mapping the values to the function and get the results from it.

Mostly an iterable values will be passed to map function and results are retrived from the specific function by passing values one by one.

In the list comprehension map function will take 2 arguments like function and list of element on which the function to apply. Once done then it will return a map object so to get the results we need to get it converted to the list again.